

Method and Apparatus For Assisting Laser Material Processing

Abstract of Disclosure

A laser machining apparatus includes a nozzle connected to a pressurized gas and liquid reservoir for propelling a fine spray, mist or stream of a liquid such as water at the workpiece to be machined. A laser beam, preferably as may be generated by a UV laser or other source of exposure radiation, but is not strongly absorbed by the liquid assist material, is focused to the workpiece using, e.g., a focusing or imaging lens, while the fine spray, mist or liquid stream is propelled at the workpiece creating a layer of the liquid on its surface as the beam is incident upon the workpiece for machining.

Figures